

JAPAN

EDICT OF GOVERNMENT

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JIS B 4802 (1998) (English): Circular saw blades
for woodworking

ISO INSIDE

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*The citizens of a nation must
honor the laws of the land.*

Fukuzawa Yukichi

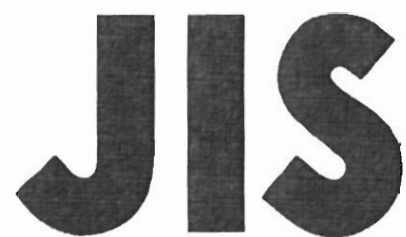
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JAPANESE
INDUSTRIAL
STANDARD

Translated and Published by
Japanese Standards Association

☞ JIS B 4802 : 1998

Circular saw blades for woodworking

ICS 79.120.20

Descriptors : circular saws (machines), woodworking machines, cutting tools,
woodworking, blades

Reference number : JIS B 4802 : 1998 (E)

B 4802 :1998

Foreword

This translation has been made based on the original Japanese Industrial Standard revised by the Minister of International Trade and Industry through deliberations at Japanese Industrial Standards Committee in accordance with the Industrial Standardization Law. Consequently, JIS B 4802:1973 is replaced with JIS B 4802:1998.

This revision is intended to conform to corresponding International Standard, **ISO 2935:1974**, *Circular saw blades for woodworking — Dimensions* and practical use.

Attention is drawn to the possibility that some parts of this Standard may conflict with a patent right, application for a patent after opening to the public, utility model right or application for registration of utility model after opening to the public which have technical properties. The relevant Minister and the Japanese Industrial Standards Committee are not responsible for identifying the patent right, application for a patent after opening to the public, utility model right or application for registration of utility model after opening to the public which have the said technical properties.

Date of Establishment: 1950-08-14

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Circular saw blades for woodworking

Introduction This Japanese Industrial Standard has been made on the basis of **ISO 2935**, *Circular saw blades for woodworking — Dimensions* published in 1974 as the first edition, without changing the technical contents except the classes and their shapes and dimensions specified conventionally in the Japanese Industrial Standard. Besides, the items (quality, material, test method, inspection, designation of products and marking) not specified in the corresponding International Standard were also added to this Japanese Industrial Standard.

1 Scope This Japanese Industrial Standard specifies the circular saw blades for woodworking (hereafter referred to as "circular saw"). Those of special type such as miter saws are excluded.

Remarks: The following is the corresponding International Standard to this Standard:

ISO 2935:1974 *Circular saw blades for woodworking — Dimensions*

2 Normative references The following standards contain provisions which, through references in this Standard, constitute provisions of this Standard. The most recent editions of the standards indicated below shall be applied.

JIS B 7502 *Micrometer callipers*

JIS B 7503 *Dial gauges*

JIS B 7726 *Rockwell and Rockwell superficial hardness testing machines*

JIS G 4401 *Carbon tool steels*

JIS Z 2245 *Method of Rockwell and Rockwell superficial hardness test*

3 Quality

3.1 Appearance The appearance shall be free from cracks, flaws harmful in use and the finish shall be good.

3.2 Variation of thickness The variation of thickness of the circular saw shall be as given in Table 1.

Table 1 Variation of thickness

Unit: mm

Division of outside diameter	Variation of thickness (in a single saw)
630 or under	0.06 or under
Exceeding 630	0.1 or under

3.3 Thickness The hardness and variation of hardness of the circular saw shall be as given in Table 2.

Table 2 Hardness

Division of outside diameter mm	Hardness HRC	Variation of hardness (in single saw) HRC
630 or under	43 to 54	4 or under
Exceeding 630	40 to 51	5 or under

3.4 Axial runout The axial runout of the circular saw shall be as given in Table 3.

Table 3 Axial runout

Unit: mm

Division of outside diameter	300 or under	Exceeding 300 up to and including 630	Exceeding 630 up to and including 1 000	Exceeding 1 000
Axial runout	0.5 max.	0.9 max.	1.5 max.	2.5 max.

4 Shape and dimensions The shape and dimensions shall be as given in Attached Table 1.

5 Materials The materials for the circular saw shall be SK5 specified in **JIS G 4401** or the materials equivalent or superior thereto in performance.

6 Test method

6.1 Thickness The thickness shall be measured at any four points on the circumference approximately 5 mm to 15 mm inside the bottom of gullet, using a micrometer specified in **JIS B 7502**.

The variation of thickness shall be expressed with the difference between the maximum value and the minimum value out of the values measured on a single saw.

6.2 Hardness The hardness shall be measured at the similar points to those in **6.1** using a Rockwell hardness testing machine specified in **JIS B 7726** in accordance with the test method specified in **JIS Z 2245**.

The variation of hardness shall be expressed with the difference between the maximum value and the minimum value out of the values measured on a single saw.

6.3 Axial runout The axial runout shall be measured, as shown in Fig. 1, on the circumference approximately 5 mm to 15 mm inside the bottom of gullet using a dial gauge specified in **JIS B 7503**, and the maximum value of the measured values shall be taken as the axial runout.

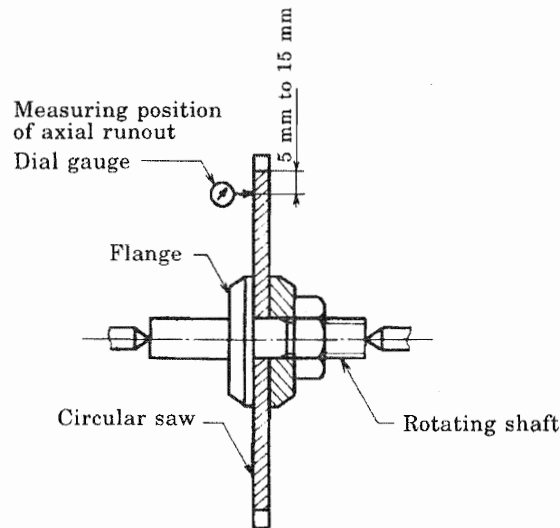


Fig. 1 Axial runout

Remarks: The measuring apparatus shown is an example. The diameter of the flange in this case shall be not more than $\frac{1}{3}$ of the outside diameter of the circular saw.

7 Inspection Inspection shall be carried out on quality, shape and dimension and the result shall conform to the requirements in **3** and **4**.

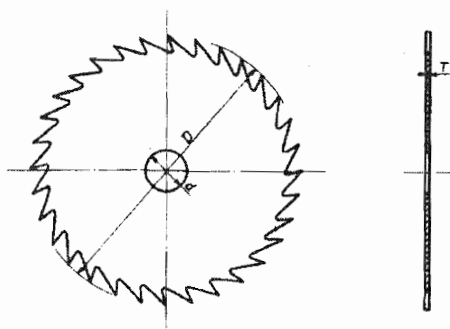
8 Designation of products The designation of products shall be given by the number of Standard or title of Standard, outside diameter, thickness and diameter of hole.

Examples: JIS B 4802	400×1.6×30
Circular saw blades for woodworking	400×1.6×30

9 Marking The following information shall be marked on the product.

- Outside diameter (D) × thickness (T) × diameter of hole (d)
- Name of material or symbol
- Manufacturer's name or its abbreviation

Attached Table 1 Shape and dimension



The shape of teeth is shown as an example.

Unit: mm

Outer diameter		Thickness		Diameter of hole	Reference
D	Tolerance	T	Tolerance	d	Number of teeth
40	±1.5	0.8	In the case of the thickness of 2 or under ±0.06	12.5	80, 90, 100
50					
63					
80	±2	0.8, 1	In the case of the thickness exceeding 2 ±0.1		
100				20	
125		0.8, 1, 1.2			
140		0.8, 1, 1.2, 1.4			
160		1, 1.2, <u>1.4</u> , 1.6		<u>19</u> , 20	
180				<u>19</u> , <u>20</u> , 30, 60	
200		1, 1.2, <u>1.4</u> , 1.6, 2		<u>25.4</u> , 30, 60	
250		1.2, <u>1.4</u> , 1.6, 2, 2.5			
<u>300</u>	±3				
315		<u>1.2</u> , <u>1.4</u> , 1.6, 2, 2.5, 3.2			
355					
400					
450		<u>1.4</u> , <u>1.6</u> , 2, 2.5, 3.2, 4		<u>25.4</u> , 30, 85	
500	±4				70, 80, 100
630		<u>1.6</u> , <u>2</u> , 2.5, 3.2, 4		<u>31.75</u> , 40	
800	±6			<u>38.1</u> , 40	
1 000		<u>1.6</u> , <u>2</u> , <u>2.5</u> , 3.2, 4, 5			
1 250	±10	<u>2</u> , <u>2.5</u> , 3.6, 4, 5		<u>44.45</u> , 60	
1 600		4.5, 5, 6		60	
2 000		5, 7			

- Remarks 1 The tolerance on the diameter of hole shall be H11. However, H9 is intended for particular uses, such as: use on the same spindle with several blades, blades turning at high speed.
- 2 The values underlined in the Table are the dimensions not included in the original International Standard.

Errata for JIS (English edition) are printed in *Standardization Journal*, published monthly by the Japanese Standards Association, and also provided to subscribers of JIS (English edition) in *Monthly Information*.

Errata will be provided upon request, please contact:
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